



## Senate

General Assembly

February Session, 2006

**File No. 328**

Senate Bill No. 191

*Senate, April 4, 2006*

The Committee on Environment reported through SEN. FINCH of the 22nd Dist., Chairperson of the Committee on the part of the Senate, that the bill ought to pass.

***AN ACT CONCERNING COST SAVINGS THROUGH ADOPTION OF  
HIGH PERFORMANCE ENERGY EFFICIENT GREEN BUILDING  
STANDARDS.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1       Section 1. (NEW) (*Effective October 1, 2006*) (a) Notwithstanding any  
2       provision of the general statutes, any new construction of a facility that  
3       is projected to cost not less than one million dollars, for which not less  
4       than twenty-five per cent of the costs are financed with state funds,  
5       shall comply with the regulations adopted pursuant to subsection (b)  
6       of this section. The Secretary of the Office of Policy and Management,  
7       in consultation with the Commissioner of Public Works, may exempt  
8       any facility from complying with said regulations if said secretary and  
9       commissioner both find, in a written analysis, that the cost of such  
10      compliance significantly outweighs the benefits. For purposes of this  
11      section, "facility" means any building, including, but not limited to, a  
12      state-financed housing project or a building that is used or intended to  
13      be used as a school.



14 (b) Not later than January 1, 2007, the Secretary of the Office of  
15 Policy and Management, in consultation with the Commissioner of  
16 Public Works, the Commissioner of Environmental Protection and the  
17 Commissioner of Public Safety, shall adopt regulations, in accordance  
18 with the provisions of chapter 54 of the general statutes, to adopt  
19 building construction standards that are consistent with or exceed the  
20 silver building rating of the Leadership in Energy and Environmental  
21 Design's rating system for new commercial construction and major  
22 renovation projects, as established by the United States Green Building  
23 Council, or an equivalent standard, including, but not limited to, a  
24 two-globe rating in the Green Globes USA design program, and  
25 thereafter update such regulations as the secretary deems necessary.

This act shall take effect as follows and shall amend the following sections:		
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Section 1	<i>October 1, 2006</i>	New section
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**ENV**      *Joint Favorable*



The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

### **OFA Fiscal Note**

#### **State Impact:**

Agency Affected	Fund-Effect	FY 07 \$	FY 08 \$
Policy & Mgmt., Off.	GF - Cost	Minimal	Minimal
Treasurer, Debt Serv.	GF - Cost	Potential	Potential
Treasurer, Debt Serv.	TF - Cost	Potential	Potential
All agencies with care & control of their buildings; Pub. Works, Dept.; Judicial Dept.; UConn	GF - Savings	None	Potential Significant
Pub. Works, Dept.; Department of Environmental Protection; Public Safety, Dept.	GF - Cost	None	None

Note: GF=General Fund; TF=Transportation Fund

#### **Municipal Impact:**

Municipalities	Effect	FY 07 \$	FY 08 \$
Various Municipalities	STATE MANDATE - Cost	Potential	Potential
Various Municipalities	Savings	None	Potential Significant

### **Explanation**

The bill requires the Secretary of the Office of Policy and Management (OPM), in consultation with the Commissioners of the Department of Environmental Protection and Public Safety, to adopt building construction standards that are consistent with or exceed the standards as established by the United States Green Building Council (USGBC.) The bill also allows OPM, in consultation with the Department of Public Works (DPW), to exempt any buildings from the new regulations when the cost of compliance significantly outweighs the benefits. Therefore, it is anticipated that these additional construction costs will only be incurred in cases where the operational savings exceed the cost, over the life of the building. It is anticipated that OPM will incur minimal costs from adopting regulations and



performing cost/benefit analyses of new construction projects. The Department of Environmental Protection, the Department of Public Safety and the Department of Public Works will incur a minimal workload increases due to consultations, which are anticipated to be within existing resources.

The bill requires that any building that costs \$1 million or more to construct and is financed with at least 25% in state funds must comply with the building standards adopted by OPM. This is expected to result in net savings to the state in future years that are potentially significant. Increases in capital construction costs for new buildings would be offset by savings in the operating costs of these buildings over their lifetime. Based on DPW's experience with 4 projects undertaken in the past year, the anticipated cost differential of doing a major building project under USGBC standards is anticipated to increase total project costs by less than 1%. There will also be some additional costs for conducting the mandatory "building commissioning" at the end of construction, which are estimated to be between \$100,000 and \$200,000 for a major project. Since building construction is financed with bond funds, any increase in construction costs would result in an increase in General Fund and Transportation Fund debt service costs.

The additional construction costs could be offset by savings in the operations of the new buildings over their lifetime, especially in heating and ventilation costs. These savings are estimated by industry sources to be up to 30% of annual utility costs. Any General Fund operating budget savings would be achieved through the Department of Public Works, the Judicial Department, the University of Connecticut and any agency with care and control of its buildings. Any Transportation Fund operating budget savings would be achieved through the Department of Transportation and the Department of Motor Vehicles.

In the case of school construction projects, passage of this bill could substantially increase the state's costs for projects where the state's



share of construction costs is at least 25%. It should be noted that the operating cost savings for these buildings would accrue to the municipalities. Since school construction projects are financed with General Fund bond funds, any increase in construction costs would result in an increase in General Fund debt service costs. (The state normally provides between 20% and 80% of the construction cost for school building projects and magnet schools receive 100% reimbursement.)

### ***Municipal***

The bill establishes the same requirements for all new construction of buildings when at least 25% of the costs are provided by state funds. OPM, in consultation with DPW, would be able to exempt any buildings from these new standards when the cost of compliance significantly outweighs the benefits. Therefore, the increases in school construction costs for towns would be offset by potentially significant savings in the operating costs of these buildings over their lifetime. It is a State Mandate since it would increase capital construction costs.

### ***The Out Years***

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation.



**OLR Bill Analysis****SB 191*****AN ACT CONCERNING COST SAVINGS THROUGH ADOPTION OF HIGH PERFORMANCE ENERGY EFFICIENT GREEN BUILDING STANDARDS.*****SUMMARY:**

This bill requires certain state-financed new facility construction to comply with green building regulations if it is projected to (1) cost at least \$1 million and (2) receive at least 25% state financing. The bill requires the Office of Policy and Management (OPM), with the public works (DPW), environmental protection, and public safety commissioners to develop regulations by January 1, 2007. The regulations must adopt building construction standards that are consistent with the Leadership in Energy and Environmental Design's (LEED) rating system silver building or higher rating for new commercial construction and major renovation projects, or an equivalent standard, including a two-globe rating in the Green Globes USA design program. The OPM secretary can update the regulations as necessary, once they have been adopted.

The secretary, in consultation with the DPW commissioner, may exempt any facility from complying with the regulations if they find, in a written analysis, that compliance costs significantly outweigh the benefits.

Under the bill, "facility" means any building including a state-financed housing project or a building that is used or intended to be used as a school.

EFFECTIVE DATE: October 1, 2006



**BACKGROUND*****LEED and United States Green Building Council (USGBC)***

The LEED rating system, a program of the USGBC, is a self-assessing system designed for rating new and existing commercial, institutional, and high-rise residential buildings. Different levels of green building certification are awarded based on the total credits earned.

USGBC is comprised of organizations that promote environmentally sound buildings and adoption of green building practices, technologies, policies, and standards.

***Green Globes USA and the Green Building Initiative***

Green Globes is a web-based, green building audit tool from Canada. It consists of questionnaires for each phase of a project and person involved in the design process (e.g., architect, mechanical engineer, or landscape architect). Scores give the percentage of points for meeting best energy and environmental design practices and standards.

The Green Building Initiative, a not-for-profit U. S. organization, promotes Green Globes USA and is supported by groups and individuals interested in promoting energy-efficient and environmentally sustainable practices in residential and commercial construction.

**COMMITTEE ACTION**

Environment Committee

Joint Favorable

Yea 28      Nay 0      (03/16/2006)